

# PLANNING CONSIDERATIONS FOR ON-FARM FOOD WASTE COMPOSTING



## Food Waste is Solid Waste

Food waste composting is a solid waste management activity that must be managed properly **to ensure public health.**

# Commercial Compost Operations: Processors

- **Viable commercial operations focus on:**
  - Making a saleable product for profit.  
or
  - Making a profit from managing waste products.



# Commercial Compost Operations: Suppliers

- **Suppliers of the raw materials objectives:**
  - Reduced disposal costs.
  - “Green” actions for perceived community benefit and marketing.





In order to resolve potential barriers or obstacles they must first be identified.



# Potential Impediments to Composting

Commercial food waste composting efforts may be impeded by the following:

- Local zoning and land use regulations
- State regulatory requirements
- Costs
- Public perception and acceptance.



# Local Zoning/Land Use

- Since food waste composting is a solid waste management activity:
  - Processors may be classified as a Solid Waste Management Facility **or** a Recycling Processor.
  - Such designations must be conducted in solid waste floating zones (SWFZ).



# Local Zoning/Land Use

These types of operations must receive:

- A finding in consistency with the **County Solid Waste Management Plan.**
- A finding in consistency with the **County-wide Comprehensive Plan.**





# State Regulatory Requirements

- MDE may determine that a composting facility accepting only pre-consumer food waste or has little non-compostable contamination is managing a recyclable item and therefore is treated as a *Recycling Processing Facility*.



# State Regulatory Requirements

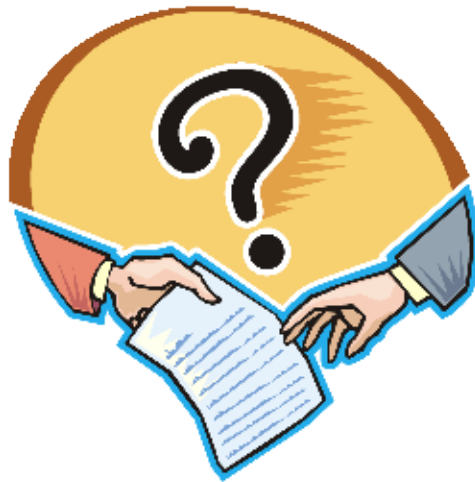
OR...

- MDE may view a food waste composting operation as a *Solid Waste Processing Facility* and require a Refuse Disposal Permit.



# State Regulatory Requirements

\* This determination is made by MDE on a case by case basis. \*



# State Regulatory Requirements

**Regardless of the type of operation, a composting facility operator must protect the public's health and welfare through proper management.**



# State Regulatory Requirements

- There is also the potential for a processor who accepts wood waste (*which will most likely be necessary as a carbon additive*) to obtain a **Natural Wood Waste Processing Facility Permit** from MDE.





# State Regulatory Requirements

- The processor most likely will need to obtain a **General Discharge Permit for Stormwater Associated with Industrial Activity** from MDE's Water Management Administration.



# State Regulatory Requirements: Self Production and Sale

- Production and Sale of Fertilizers, Soil Conditioners and Compost is regulated by the Maryland Department of Agriculture (MDA) as defined in **COMAR 15.18 including the PFRP\* as defined in CFR 40 part 503 sub-parts 13 and 32.**



*\*Process to Further Reduce Pathogens*

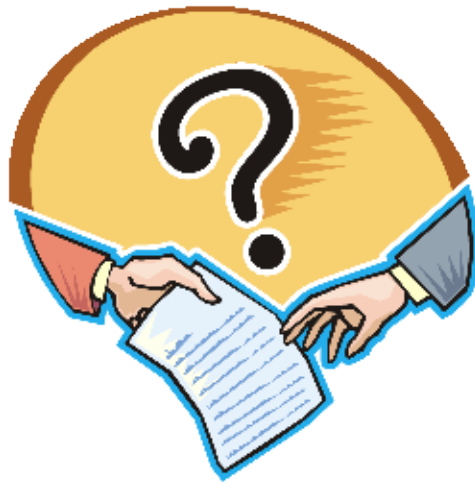
# State Regulatory Requirements: Self Production and Sale

## **MDA Oversight Includes:**

- ✓ Annual registration of the product (with fee).
- ✓ Semi-annual production report on tonnage produced (with fee) .
- ✓ The facility operator must become a Certified Compost Facility Operator and maintain this certification.
- ✓ Conduct regular analysis of the finished product by qualified laboratories prior to making the product available for sale as required by law.

# State Regulatory Requirements

- These requirements may be avoidable in part or in whole for **Institutional or On-Site Composting.**



# State Regulatory Requirements: Self Production and Use

Compost use is bound by **Nutrient Management Regulations.**

- *Farmers must monitor and report compost applications.*
- *Compost applications will impact other nutrient application plans.*





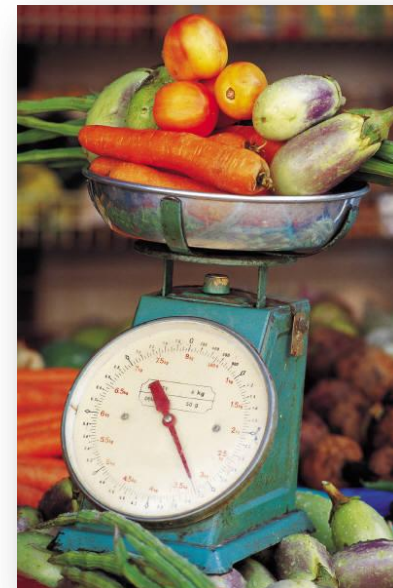
# Self Production and Use

## Cost to Benefit Analysis:

- Producing compost for fertilizer/ soil amendment purposes

vs.

- Purchasing finished product.



# Costs to consider

- Operations, rolling stock, production costs, permitting, design, equipment, monitoring, reporting, etc.



# Costs

Smaller commercial operations—particularly on-farm operations primarily focused on managing their own waste—will have greatly reduced costs.



# Additional Considerations

## Compost producers will also need to address:

- *Finish product markets and processes for dealing with residuals from the composting process.*
- *Supply of carbonaceous or bulking material to mix with food waste, which may be competitive.*



# Public Perception and Acceptance

- Even if a compost producer meets all regulatory obstacles they still face public scrutiny.





# Public Perception and Acceptance

- Operations are ideally located in non-residential areas.
- Public complaints can quickly shut down composting operations even in right-to-farm areas.



# Public Perception/Acceptance

- Negative public perception may be overcome through advanced communication, ongoing public education and following best management practices.



# Public Perception/Acceptance

- Planning should also include:
  - *Development of adequate buffers.*
  - *Operational tactics for odor, vector and litter control.*



# Conclusion

A person or entity wishing to accept and compost food waste will need to:

- Address any local zoning or land use requirements.
- Meet with MDE Air, Water and Solid Waste agencies to determine their requirements in advance.
- Management food waste so as not to impact citizen's or the environment.





## Remember: Food Waste is Solid Waste

*Food waste composting is a solid waste management activity that must be managed properly to ensure public health.*